APPENDIX D

KENNEDY OIL
MASTER DRILLING PLAN
COALBED METHANE WELLS IN THE BIG RED FIELD AREA
SWEETWATER COUNTY, WYOMING

DRILLING PROGNOSIS

THE FOLLOWING INFORMATION WILL BE PROVIDED WITH EACH INDIVIDUAL APPLICATION

Ground elevation, estimated tops of important geologic markers and estimated depths at which the top and bottom of anticipated water, oil, gas or other mineral bearing formations are expected to be encountered.

Shallow surface sands from the surface to the top of the Fort Union Coals may contain fresh water. Any shallow water zones encountered will be adequately protected and reported. All potentially productive hydrocarbon zones will be cemented off.

1. PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

TYPE: 10" double gate hydraulic with 1 blind ram, 1 pipe ram and annular BOP; equipped with choke and manifold and 9"-10" casing head with annular preventer. There will be a fill line above uppermost preventer.

PRESSURE RATING: 3000 psi Annular Preventer, 3000 psi BOP, 3000 psi choke manifold and accumulator and 3000 psi casing head

TESTING PROCEDURE: Ram preventers and related control equipment (choke manifold, kelly cocks, etc.) will be pressure tested to 100% of their rated working pressure for a period of 10 minutes. The casing string will be tested to 70% of its internal yield strength.
BOP's will be tested when installed, every 30 days, or whenever any seal is broken, as per Onshore Order No. 2.

Fill line will be 2", kill line will be 2", choke relief line will be 3". BOP drills and tests will be recorded in the driller's log.

The choke manifold and BOP extension rods with handwheels will be located outside the sub-structure or the hydraulic BOP closing unit will be located at least 25 feet from the well head. Exact locations and configurations will depend upon the particular rig contracted to drill this hole.
The choke line (the line which connects the BOP stack to the choke manifold) will be as straight as possible and turns, if required, will have a targeted T block if the required BOP stack is three thousand pounds or greater.

A flare line will be installed after the choke manifold, extending to 125 feet (minimum) from the center of the drill hole to the pit.

2. THE PROPOSED CASING AND CEMENTING PROGRAM (ALL NEW):

A. CASING PROGRAM

HOLE SIZE	CASING SIZE	WT./FT.	GRADE	JOINT	DEPTH SET
12 1/4”	9 5/8”	32#	H40	ST&C	*400’
8 3/4"	7"	20#	K55	ST&C/LT&C	TOP OF COAL
12"	open hole	N/A	N/A	N/A	BOTTOMOFCOAL

*SURFACE PIPE WILL BE SET TO A MINIMUM DEPTH OF 400’, OR AS PER REQUIREMENT OF WOGCC FOR THE INDIVIDUAL WELL

Casing string(s) will be pressure tested to .22 psi/ft. or 1500 psi, whichever is greater
Minimum design factors for tension, collapse and burst are:
Tension: 1.6
Collapse: 1.125
Burst: 1.00

B. CEMENTING PROGRAM

SURFACE PIPE 9 5/8” surface pipe will be cemented back to surface, with 20% excess using Class G cement, 3% calcium chloride accelerator, w/additives

PRODUCTION CASING 7” production casing will be cemented back to surface with 20% excess using lite cement and 25sx Class G (tail)

Circulated to surface with 20% excess. If cement does not circulate, the annulus will be topped off with neat cement to the surface.

A sufficient amount of cement will be used to ensure that all potentially productive hydrocarbon zones are cemented off. In the event of lost circulation, a bond log will be run.

WOC TIME: WOC time minimum 12 hours, or until stabilized

CENTRALIZERS: 1 in surface pipe; 1 every 100’ for bottom 500’ or as required by BLM

3. MUD PROGRAM (VISUAL MONITORING AND FLOW SENSOR DEVICE):

INTERVAL	TYPE	WEIGHT	VISCOSITY	FLUID LOSS
0 - TOP OF COAL	Native/surfactants/LCM*/bentonite	8.5-9.0	28-32	*
TOP OF COAL-TD	OPEN HOLE/UNDER REAM/water			

*Mud material will consist of native materials, surfactants, LCM and bentonite as needed. Sufficient mud inventory will be maintained on location during drilling to handle any adverse conditions that may arise. Inventory will not be less than the required amount needed to drill this well.

4. WATER SOURCE:

Water for drilling and cementing will be trucked from a water well located in Sec 28, T23N, R96W (Harmel Jolly, owner) AND/OR Sec. 31, T24N, R97W (Tom Brown Inc., Owner). The water source will be properly permitted with the State Engineers Office. No new Federal ROW will be needed for access to this water well.

5. EVALUATION PROGRAM:

LOGS: DUAL INDUCTION
SONIC (optional)
NEUTRON-DENSITY (optional)

a gamma ray log shall be run from TD to the ground surface

DST'S: NONE ANTICIPATED

CORES: NONE ANTICIPATED

SAMPLES: 10' samples to bottom of production casing; 1' samples across coal

Evaluation program may change at the discretion of the well site supervisor

STIMULATION: no stimulation or frac treatment has been formulated for this test. The BLM will be notified by 'Sundry Notice' of any completion activity with a complete frac program. The drill site, as approved, will be of sufficient size to accommodate all completion activities.

6. ABNORMAL CONDITIONS:

None anticipated during drilling and completion
The surface sands and the Fort Union Coal are potential zones of lost circulation. This will be alleviated by the use of lost circulation materials, as needed.
Maximum anticipated bottom hole pressure equals 2400 psi. Maximum anticipated surface pressure equals 0 psi.

No H2S gas is expected to be encountered, based on reports from previous drilling in the area at this depth.

7. DRILLING ACTIVITY:

A. Anticipated Commencement Date: BLM WILL BE NOTIFIED OF SPUD DATE, AT LEAST 24 HOURS IN ADVANCE FOR EACH INDIVIDUAL WELL

Drilling Days: APPROXIMATELY 5 DAYS
Completion Days: APPROXIMATELY 10 DAYS

B. Auxiliary Equipment

1. A kelly cock will be kept in the string at all times
2. Periodic checks will be made each tour of the mud system (refer to Item #5)
3. A stabbing valve will be kept on the derrick floor to be stabbed into the drill pipe whenever the kelly is not in the string
4. No bit float will be used

8. NOTIFICATION

Bureau of Land Management
Rock Springs Field Office

Specific contacts and phone numbers will be provided by the Rock Springs Field Office as an attachment to the approved permit.

The spud date will be orally reported to the Authorized Officer (AO) TWENTY-FOUR (24) HOURS PRIOR TO SPUDDING.

All wells, whether drilling, producing, suspended or abandoned shall be identified in accordance with 43 CFR 3162.6, which requires the name of the operator, lease number, well number and location of the well.

In accordance with *Onshore Oil & Gas Order No. 1*, all wells will be reported on MMS Form 3160-6, *Monthly Report of Operations and Production,* starting with the month in which operations commence and continuing each month until the well is physically plugged and abandoned.

All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL-3A will be reported to the Rock Springs Field Office Office. Major events will be reported verbally within twenty-four (24) hours and will be followed with a written report within fifteen (15) days. 'Other than Major Events' will be reported in writing within fifteen (15) days. 'Minor Event' will be reported on the *Monthly Report of Operations and Production* (Form #3160-6).

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly-drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the Area Petroleum Engineer.

A *Notice of Intent to Abandon* (Form #3160-5) will be filed with the AO within fifteen (15) days following the granting of oral approval to plug and abandon. Upon completion of approved

plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The following information will be permanently placed on the marker with a plate or cap, or beaded-on with a welding torch: Operator Name, Well Name and Number, Location by Quarter/Quarter, Section, Township, Range and Federal Lease Number.

A *Subsequent Report of Abandonment* (Form #3160.5) will be submitted within thirty(30) days following the actual plugging of the well bore. This report will indicate where plugs were placed and the current status of surface restoration operations. If surface restoration has not been completed at that time, a follow-up report on Form 3160-5 will be filed when all surface restoration work has been completed and the location is considered ready for final inspection.

Pursuant to NTL-4A, lessees and operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of thirty (30) days or the production of fifty (50) MMCF of gas, whichever occurs first. An application must be filed with the AO, and approval received, for any venting/flaring of gas beyond the initial thirty (30) days or otherwise authorized test period.

Not later than the 5^{th} business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than ninety (90) days, the operator shall notify the AO by letter or Sundry Notice of the date on which such production has begun or resumed.

The notification shall provide as a minimum, the following information:

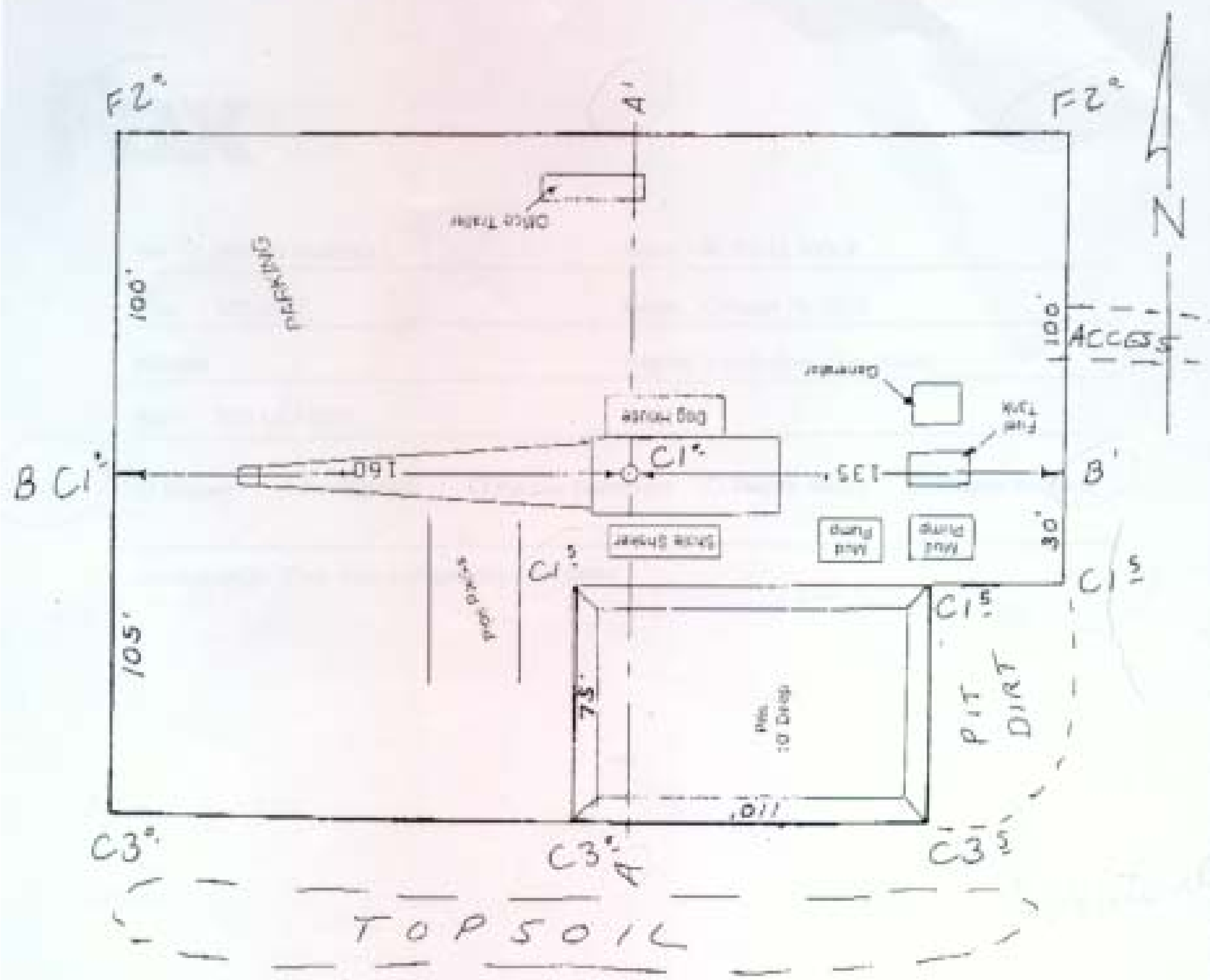
Operator name, address, telephone number
Well name and number
Well location, i.e. ¼, ¼, Section , Township, Range, P.M.
Date well was placed in a producing status
The nature of the well's production, i.e. crude oil, casing head gas, natural gas and entrained liquid hydrocarbons
The OCS, Federal or Indian lease prefix and number on which the well is located. Otherwise, the non-Federal or non-Indian land category, i.e. state or private

In accordance with 43 CFR 3162.7-4(d), within sixty (60) days following construction of a new tank battery, a site facility diagram of the battery showing actual conditions and piping must be submitted to the AO. Facility diagrams shall be filed within sixty (60) days after existing facilities are modified.

Pursuant to *Onshore Oil & Gas Order No. 1,* lessees and operators have the responsibility to see that their exploration, development, production and construction operations are conducted in such a manner which conforms with applicable Federal laws and regulations and with State and local laws and regulations to the extent that such Sate and local laws are applicable to operations on Federal and Indian lands.

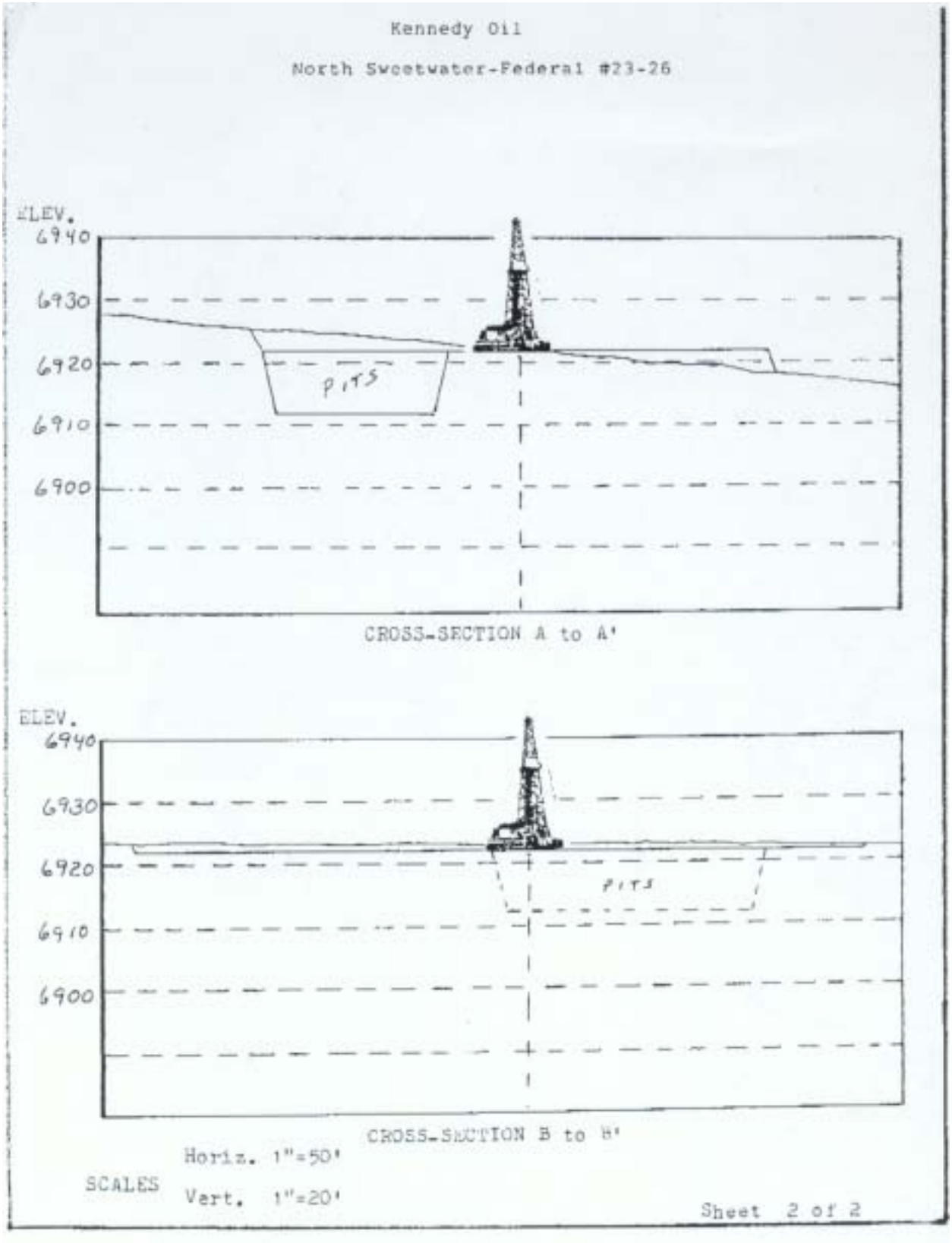
Kennedy Oil

North Sweetwater-Federal #23-26



Scale 1"=50'

Cross-sections A to A' & B to B'see page 2


Kennedy Oil
North Sweetwater-Federal #23-26
ELEV.
6940
6930
6920
6910
6900
PITS
CROSS-SECTION A to A'
ELEV.
6940
6930
6920
6910
6900
PITS
CROSS-SECTION B to B'
SCALES
Horiz. 1"=50'
Vert. 1"=20'
Sheet 2 of 2

KENNEDY OIL
MASTER SURFACE USE AND OPERATIONS PLAN
COALBED METHANE WELLS IN THE BIG RED FIELD AREA
SWEETWATER COUNTY, WYOMING

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

WELL LOCATIONS
The proposed well sites are staked.
A plat of the surveyed location, signed by a surveyor licensed in the State of Wyoming, will be attached to each individual APD.

EXISTING ACCESS ROADS (RESOURCE ROADS)
The project area is approximately 70 miles northeast of Rock Springs, Wyoming. To reach the project area, travel 40 miles east of Rock Springs on I80 to Point of Rocks Exit; turn north on County Road No. 21 and proceed approximately 32 miles to the turnoff which is identified on the attached map labeled *EXHIBIT S#1*.

Please refer to the map labeled *EXHIBIT S#1* for existing access roads. Existing roads that are not county roads are called 'resource roads' on the map and the mileage to the project area is clearly marked.

The existing access roads will be maintained in the same or better condition as existed prior to the commencement of operations, and said maintenance will continue until final abandonment and reclamation of the well location.

Travel will not be allowed during periods when severe rutting or resource damage might occur.

NEW/PROPOSED ACCESS ROADS (SPECIAL PURPOSE ROADS)
New access routes necessary to each well are shown on the maps labeled *EXHIBITS S#2A, B* submitted with this Plan. These have been marked by stakes every 300' or within line-of-sight. New access roads are called 'temporary roads' on the map and the mileage to each well site is clearly marked.

FOR DRILLING: The new access to well sites will be 2-track trails, not exceeding 12 feet wide and flat-bladed only where necessary, in order to minimize surface disturbance. The equipment utilized to drill and complete these coalbed methane wells is not of a size or number to require crowned and ditched roadways for drilling and completion activities. Where necessary, native surfacing materials will be utilized to prevent rutting or other damage. Where possible, a blade or brush hog will be utilized to only take off surface vegetation without disturbing the root zone. Any other surface-disturbing activity (cuts or fills) that may be necessary for safe access to drill the well will be only as stipulated for that individual well by the BLM (surface owner).

Any fence cuts, cattle-guards or culverts necessary are shown on Exhibit S#2.

Travel will not be allowed during periods when severe rutting or resource damage might occur. Should severe rutting or resource damage occur as a result of drilling or completion operations, the BLM Authorized Officer may evaluate the damage and as a result of such evaluation may require subsequent new access roads to be crowned and ditched to BLM standards for drilling and completion activities.

FOR PRODUCTION: The wells covered by this plan are coalbed methane wells and there is little anticipated heavy truck traffic after drilling and completion activities. and 2) maintenance activities (very occasional). A light truck (pickup) will access each well 1 X per day under ordinary circumstances. For these reasons, excess surface disturbance to upgrade roads is unnecessary. The BLM AO may require upgrading of the road(s) to BLM standards if the conditions of the APDs are not adhered to by the operator and its contractors and/or if resource damage occurs.

Where necessary, the holder shall furnish and install culverts of the gauge, materials, diameters and lengths required by BLM. Culverts shall be free of corrosion, dents or other deleterious conditions. Culverts shall be placed on channel bottoms on firm, uniform beds which have been shaped to accept them and aligned to minimize erosion. Backfill shall be thoroughly compacted. No equipment shall be routed over a culvert until backfill depth is adequate to protect the culverts. The minimum diameter for culverts shall be 18 inches.

If snow removal activity is undertaken off traveled ways, equipment used shall be equipped with shoes to keep the blade six (6) inches above the natural ground surface. Special precautions shall be taken where the surface of the ground is uneven and at drainage crossings to ensure that equipment does not destroy vegetation. Location of snow stockpiles, if needed, shall be approved by the authorized officer in advance.

Any new up-graded, all-weather access roads required for central metering or compressor sites will be identified and approval applied for prior to construction.

LOCATION OF EXISTING WELLS
All wells (water, injection, disposal, producing, abandoned and drilling) within a one-mile radius of the BIG RED project area are identified on *EXHIBIT S#3* attached hereto.

WELLSITE LAYOUT
Wellsite/rig layout schematics will be attached to each individual APD.
Schematic will show the drill site layout as staked. Cross sections have been drafted to visualize the planned cuts and fills across the location (see Figure #2).
No permanent living facilities are planned. There may be three trailers on location; one each for the mud logger, geologist and toolpusher.

PADS AND PITS/CONSTRUCTION/OPERATIONS
All equipment and vehicles will be confined to the access road, pad, and area specified in the APD. Remove the top six inches of soil from the location including areas of cut, fill, and/or subsoil storage areas and stockpile at the site (see schematic for location of topsoil stockpiles). The topsoil will be clearly segregated from excess spoil material. If ground frost prevents the segregation and removal of

the topsoil material from the less desirable subsoil material, cross-ripping to the depth of the topsoil material may be necessary. If there is snow on the ground when construction begins, the operator will remove it before the soil is disturbed and pile it downhill from the topsoil stockpile location. The operator will not push soil material and overburden over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved and where it doesn't impede watershed and drainage flows.

Construct the backslope no steeper than 1:1. Construct the foreslope no steeper than 1:1.
A flare pit will be constructed on the well pad for use during drilling operations. It will be located at least 125-feet from the well head.

The reserve pit will be constructed with a minimum of one-half the total depth below the original ground surface on the lowest point within the pit, and oriented to prevent collection of surface runoff. After the drilling rig is removed, the operator may need to construct a trench on the uphill side of the reserve pit to divert surface drainage around it. If constructed, the trench will be left intact until the pit is closed.

The reserve pit will be lined with an impermeable liner. An impermeable liner is any liner having a permeability less than 10^{-7} cm/sec. The liner will be installed so that it will not leak and will be chemically compatible with all substances which may be put in the pit. Liners made of any man-made synthetic material will be of sufficient strength and thickness to withstand normal installation and pit use.

Construction is not permitted using frozen material, or during periods when the soil material is saturated, or when watershed damage is likely to occur.
An 18" high berm of compacted subsoil shall be constructed at the top of all fill slopes and shall tie into the cut slopes.

The reserve pit will be fenced on three non-working sides during drilling, and the fourth side at the time the rig is removed, using woven wire and 2 top strands barbed wire held in place by line posts and wooden corner 'H' braces, to protect livestock and wildlife.
Rat and mouse holes shall be filled and compacted from the bottom to top immediately upon release of the drilling rig from the location.

CONSTRUCTION MATERIALS
No construction materials will be needed for well pad construction.
No construction materials will be taken from Federal and/or Indian lands without prior approval from the appropriate Surface Management Agency.
If production is established, any construction materials needed will be purchased from a local supplier having a permitted source of materials.
No new access roads for construction materials will be required.
All construction equipment will be kept clean and weed-free so as to control any spread of noxious weeds.

LOCATION AND TYPE OF WATER SUPPLY

Water for drilling and cementing will be obtained from a water well located in Sec 28, T23N, R96W (Harmel Jolly, owner) AND/OR Sec. 31, T24N, R97W (Tom Brown Inc., Owner).
The water source will be properly permitted with the State Engineers Office.
No new Federal ROW will be needed for access to this water well.
Water for drilling will be transported by truck to the drill-site for each well.

Methods of Handling Waste Materials
Cuttings: deposited in the reserve pit
Drilling fluids: will be contained in the reserve pit and allowed to evaporate.
Sewage: Sewage and gray water will be disposed of into a portable, chemically-treated latrine and disposed of into a State of Wyoming DEQ approved disposal site. A portable, chemically-treated, self-contained latrine accessible to several well-sites will remain in the area of the wells being drilled and completed through termination of completion operations.
Garbage and other waste materials: Trash and other solid waste including cans, cable, etc. will be contained in portable trash containers. The trash containers will be disposed of into a State of Wyoming DEQ approved sanitary landfill as needed and/or upon completion of operations. No trash will be placed in the reserve pit.
Chemicals/Change Oil: Any chemical substances or any used motor oil (change oil) will be placed in closed containers and disposed of at an authorized disposal site. It will not be disposed of in the reserve pit or on the well location.
Other: Immediately after removal of the drilling rig, all debris and waste materials not contained in the trash cage will be cleaned up and removed from the well location. No adverse materials will be left on the location.
Hazardous Materials: The operator and their contractors shall ensure that all use, production, storage, transport and disposal of hazardous and extremely hazardous materials associated with the drilling, completion and production of this well will be in accordance with all applicable existing or hereafter promulgated federal, state and local government rules, regulations and guideline. All project-related activities involving hazardous materials will be conducted in a manner to minimize potential environmental impacts. A file will be maintained containing current Material Safety Data Sheets for all chemicals, compounds and/or substances which are used in the course of construction, drilling, completion and production operations.
Produced fluids: Hydrocarbons produced during completion operations will be placed in test tanks on the location. Water produced during completion operations will be put into the reserve pit as per NTL-2B. Any spills of oil, gas, salt water or other noxious fluids or solids will be cleaned up and removed to an approved disposal site.
Produced Water: Produced water will be trucked or piped to a properly permitted water disposal/injection facility for re-injection into an aquifer approved by the WOGCC.

ANCILLARY FACILITIES
None anticipated

LOCATION OF EXISTING AND/OR PROPOSED FACILITIES (FOR PRODUCTION)
ON WELL LOCATION: A schematic showing proposed well site configuration is attached to this plan, marked EXHIBIT S#4. Facilities include: a) pumping unit with a propane fired engine (convertible to natural gas) (SEE ATTACHED ENGINE SPECS); b) water storage tank(s) with

pump or off-loading system (isolated by dikes); and c)metering equipment.
OFF WELL LOCATION: New infrastructure (buried pipelines, water lines) will be necessary to each well and the proposed location of this infrastructure is identified marked as 'utility corridors' on EXHIBIT S#2 A,B. After construction, an 'as-built' map/schematic will be submitted to BLM. This 'as-built' map will show pipeline sizes and lengths, etc. Construction methods utilized will be industry standard, will minimize environmental impacts and will be in compliance with terms and conditions as stipulated by BLM (surface owner).
OTHER INFRASTRUCTURE: If the wells are commercial producers, proposed central metering sites and compressor sites will be submitted with a request for approval.

PLANS FOR RECLAMATION OF THE SURFACE:

IF THE WELL IS A DRY HOLE
Immediately after removal of the drilling rig, all debris and waste materials not contained in the trash cage will be cleaned up and removed from the well location. No adverse materials will be left on the location.

During reclamation of the site, the operator will push fill material into the cuts and up over the backslope to approximate the original topography. No depressions will be left that trap water or form ponds.

The fluids and mud must be dry in the reserve pit before recontouring pit area. The operator will be responsible for recontouring of any subsidence areas that develop from closing a pit before it is completely dry. The plastic pit liner will be cut off below grade and properly disposed of prior to beginning recontouring.

Before the location has been reshaped and prior to redistributing the topsoil, the operator will rip or scarify the drilling platform on the contour, to a depth of at least 12 inches. The rippers are to be no farther than 24 inches apart.

Distribute the topsoil evenly over the entire location and prepare the seedbed by disking to a depth of 4-to-6 inches following the contour.

Waterbars are to be constructed at least one (1) foot deep, on the contour with approximately two (2) feet of drop per 100 feet of waterbar to ensure drainage, and extended into established vegetation. All waterbars are to be constructed with the berm on the downhill side to prevent the soft material from silting in the trench. The initial waterbar should be constructed at the top of the backslope. Subsequent waterbars should follow the following general spacing guidelines:

% SLOPE	SPACING INTERVAL (feet)
2 or <	200
2 - 4	100
4 - 5	75
5 or >	50

The operator will drill seed on the contour to a depth of .5 inches, followed by compaction of the seedbed, preventing soil and seed losses. To maintain quality and purity, certified seed with a minimum germination rate of 80% and a minimum purity of 90% will be used. The seed mixture used will be as per surface owners request.

Slopes too steep for machinery may be hand broadcast and raked with twice the specified amount of seed.

Complete fall seeding after September 15 and prior to ground frost. To be effective, complete spring seeding after the frost has left the ground and prior to May 15.

The operator will control noxious weeds on the location and along the access road. On BLM surface, this will require an authorized pesticide use permit.

All rehabilitation work, including seeding, will be completed as soon as feasible following plugging, BLM will not release the performance bond until the area has been successfully revegetated (evaluation will be made after the second growing season) and has met all other reclamation goals of the surface owner and surface management agency.

A Notice of Intent to Abandon and a Subsequent Report of Abandonment must be submitted for abandonment approval.

An above-ground tubular metal dry hole marker will be erected over the drill hole location upon cessation of drilling and/or testing operations. The marker will be inscribed with the operator's name, well number, well location, and federal lease number. Upon request from the surface owner,, the casing may be cut-off 3 feet below reclaimed ground surface (or below plow depth) with a metal plate affixed to the top providing the same well information as stated above. This monument must consist of a piece of pipe and not less than four inches in diameter and ten feet in length, of which 4 feet shall be above the general ground level and the remainder being imbedded in cement. The top of the pipe must be closed by a welded or screw cap, cement or other means.

IF THE WELL IS A PRODUCER

Landscape those areas not required for production to the surrounding topography as soon as possible. The fluids and mud must be dry in the reserve pit before recontouring pit area. The operator will be responsible for recontouring of any subsidence areas that develop from closing a pit before it is completely dry.

Distribute stockpiled topsoil evenly over those areas not required for production and reseed using the seeding method specified above.

The operator will control noxious weeds on the location and along the access road. On BLM surface, this will require an authorized pesticide use permit.

All permanent above-the-ground structures that will remain longer than six months will be painted

desert brown (Munsell standard color No. 10 YR 6/3) or other standard color required by the BLM. The exception being that Wyoming Occupation Health and Safety Act Rules and Regulations are to be complied with where special safety colors are required.

Vegetation will be controlled by mowing or cutting on the access road and around the well and production facilities to minimize fire hazard.

SURFACE OWNERSHIP:
All of the well locations in the project area are all on surface and mineral estate owned by the BLM.

OTHER INFORMATION:
An Environmental Assessment of the Project Area is being submitted. The EA will address all known potential impacts of this project.
A cultural survey of all of the well sites, access and utility corridors within the project area has been completed.
Rights-of-way grants necessary across off-lease BLM lands will be applied for from the authorized BLM Office concurrently with submittal of this plan.
Kennedy Oil agrees to comply with all stipulations found in the oil and gas leases covering the wells applied for under this Plan.
Kennedy Oil agrees to consider and, if necessary, mitigate any impacts to current land uses, rights-of-way or improvements near the proposed well sites and access that might be impacted or interfere with drilling or construction operations.

ADDITIONAL STIPULATIONS:
Should previously unknown or unanticipated cultural resources be discovered during project implementation all working the immediate area of said resources will halt. The Field Manager will be notified of the discovery. The discovery situation will then be evaluated and consulted upon as per the terms of the National Preservation Act of 1966, as amended, its implementing regulations, and the Wyoming State Protocol Agreement between the Bureau of Land Management and the Wyoming State Historic Preservation Officer. Should human remains or burial-related objects be discovered the terms of the Native American Graves and Repatriation Act and its implementing regulation may be invoked. Work in the area will not resume until the operator is notified in writing by the Field Manager that it is appropriate to do so.

The Operator shall protect all survey monuments found within the right-of-way. Survey monuments include, but are not limited to, general land office and Bureau of land Management cadastral survey corners, reference corners, witness points, U. S. coastal and geodetic benchmarks and triangulation stations, military control monuments and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, report the incident, in writing, to the AO and respective installing authority, if known. Where General Land Office or BLM right-of-way monuments or references are obliterated during operations, the holder shall secure the services of a registered land surveyor or a Bureau cadastral surveyor to restore the damaged monuments and references, record such survey in the County and send a copy to the AO. If Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbance, the holder shall be responsible for the survey cost.

The Operator/holder is responsible for the weed control on disturbed areas within the exterior limits of the permit. The control methods must be undertaken in accordance with guidelines established by the BLM, State and local authorities. Prior approval is required and use of pesticides will be limited to those approved by the AO. Prior BLM approval is not required on split estate, however, compliance with EPA regulations and State Law is required.

The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended, with regard to any toxic substances that are used, generated by or stored on the right of way or on facilities authorized under this grant. Additionally, any release of toxic substances in excess of the reportable quantity established by 40 CFR 117 shall be reported as required, a copy of which shall be furnished to the AO concurrently.

The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste, as defined in ERCL Act of 1989 or the RCRA Act of 1976, on the right of way, unless the release or threatened release is wholly unrelated to the holder's activity on the right of way. This agreement applies without regard to whether a release is caused by the holder, its agent or unrelated third parties.

LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:

Contact for additional information, if required:

Ruth M. Reile, Regulatory Affairs/Land
KENNEDY OIL
700 West Sixth Street
Gillette, Wyoming 82716
Telephone: 1-307-682-3107 or 682-8726

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill sites and access routes; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by KENNEDY OIL and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

/s/ Ruth Reile — June 14, 2002
OPERATOR/AGENT — DATE

Kennedy Oil
ADDENDUM TO MASTER SURFACE USE PLAN
SWEETWATER CBM PILOT PROJECT
Comprehensive Transportation Plan

Kennedy Oil wishes to clarify previously submitted plans for transportation/access in the Master Surface Use Plan for this project.

The theory of Kennedy Oil development is always to minimize environmental impact with proven techniques applicable to local climatic conditions and environment, including soils and topography. Other conditions that have an impact include Wyoming Department of Environmental Quality (DEQ) concerns over air quality and water quality and concerns for minimizing the "footprint" for shallow gas production. Practical engineering standards have been applied to this method of construction in the past. Experience drives us to pursue this practice wherever possible.

A qualified Company employee will design all roads in this project area.

A. UPGRADED ROADS

1. COLLECTOR ROADS (multi-purpose existing main roads)

Kennedy Oil will share maintenance on existing roads that access existing Oil & Gas in the area.

Kennedy Oil employs an aggressive cooperative policy with other Oil and Gas Companies for access for their development of deeper resources within Kennedy's developed area. Shared construction and maintenance are encouraged with other industry entities.

Required upgrading of roads for access to company's projects is acceptable to Kennedy Oil.

LOOP/RESOURCE ROADS (normal upgraded roads providing access to several individual lease roads; *see attached schematic*)

Resource roads or loop roads and roads along or across drainages or depressions that can hold water for long periods during wet seasons will be crowned and ditched with the fill removed from borrow ditches and from hills where limited sight distances are a factor.

Standard hydrological practices will be used to determine culvert size, and to minimize the effects on drainage patterns where necessary.
The road level will be elevated in low areas to prevent roadways from becoming submerged.

The travelway of the crowned and ditched roads will be 14 feet wide with a 12 feet surface of 4 inches of native gravel.

When available, drilling mud will be applied to bind the top of the road.

The sides of the road will have a minimum of 2:1 slope with ditches at a maximum of 12 feet wide. These borrows will be sloped to the natural surface outward at a 2:1 slope.

Crowning will be at a 2% slope to the center (approximately 2").

Any disturbed surface requiring reclamation will be reseeded in the first planting time allowable.

Turns will be constructed with a minimum 400 feet radius allowing for maximum speeds of 30 mph.

Maximum speeds will be posted.

Signage will be utilized to minimize public access.

Access roads to compressors that may be applied for in this project area will be crowned and ditched resource roads

B. SPECIAL PURPOSE ROADS (Minimum Impact Access)

The Transportation Plan has been formulated to illustrate an understanding of the issues and mitigation of social and logistical issues that are specific to the Red Desert Watershed.

Findings of Fact

BLM and County roads accessing the area (crown and ditch design) are typically 25 to 30 feet wide with ten to twenty foot ditches on either side. Although these roads are regularly maintained, erosion, blowouts and drainage problems are evident.

Soils in this project area are granular with little or no clay to bind them together. These soils make poor roadbeds and require excessive maintenance.
Historical two track roads in the area exhibit stable condition of both vegetation and soils. Erosion on these roads is typically minor and traffic is confined to the road. Many of these roads are over ten years old.

Two track roads reduce maximum possible vehicular speed to far less than that seen on upgraded roads. Therefore, a safety benefit is realized and the possibility of endangering wildlife is greatly reduced.

Crown and ditch roads may fit circumstances where travel by heavy vehicles is frequent over long periods of time, but that is not the case with the shallow wells proposed in this project.

Two-track roads would minimize environmental damage, discourage public travel, and be more easily abandoned and rehabilitated upon completion of shallow natural gas production.

Two-track roads are suitable for occasional light vehicle travel. The nature of methane extraction from coal allows wells to be pumped as a group that is not affected greatly when an individual well

shuts down, therefore there is no need to access wells when weather conditions do not allow. Utilization of remote monitoring (telemetry) when possible would further reduce vehicular traffic.

This minimal type of construction has been shown not to interfere with runoff patterns in areas where the practice was applied in the Powder River Basin.

1. Policy Analysis

This practice is consistent with policy 911.06. This policy states that"… Bureau roads must be designed to an appropriate standard no higher than necessary to accommodate their intended functions adequately…."

NEPA regulations 40 CFR1502.14 requires the Proposed Action and alternatives to be described in detail so that reviewers can evaluate their comparable merits.

Wyoming Road Manual Supplement 9113.16 C provides for a sub-category of "Special Purpose Road", which is designed for light travel and low speed through and within recreation areas and special use areas. The design criteria are intended to protect and enhance the existing aesthetic, ecological, environmental and cultural amenities within the area. The two-track roads identified by this proposal fit this description and serve these environmental objectives.

3. Plan for development of Special Purpose Roads (individual lease roads)

In accordance with the Green River RMP, whenever the topography allows, right-of-ways will be selected as to minimize visual intrusion of the landscape. Routes will follow contours and avoid deep cuts and fills wherever possible to prevent runoff and wind erosion. The appearance of a well-maintained road is not intrusive. Deep ruts or spoil piles destroy this illusion.

Turns will be situated with a minimum 300 feet radius allowing for maximum speeds of 10 mph.

Maximum speeds will be posted as needed.

Signage will be utilized and travel will be restricted during wet conditions when and where damage could occur. Kennedy Oil has a firm policy of immediate dismissal for offenders of this policy.

Two-track roads will be brush hogged (A mowing machine that cuts low brush near the ground without disturbing the soil) to a maximum of 30 feet width. This width allows the pipelines to be installed without further disturbance. Brush hogging allows the root system of native vegetation to hold the soil in place.

Brush will be removed from the sides of the road (utility corridor).

The roads will be routed to take advantage of prevailing winds to lessen snow drifting during winter months. Brush hogging minimizes drifting during periods of snow and wind. Snow fences may also be placed to redirect drifts.

Traffic on these roads will be reduced by burying of the water lines to disposal points reducing the need for the hauling of water as promptly as development permits.

Drilling pits are designed large enough to hold 30 days worth of produced water. Additional test pits may be applied for by Sundry Notice , if necessary, to hold water until pipelines to disposal wells can be constructed.

Mobile drilling rigs that minimize total number of heavy loads will be used.

Permits for watering of roads will be a priority for dust control.

Spot upgrading will be implemented, as the conditions require. Minor upgrading may require a 12-foot wide application of gravel 4 inches thick to stabilize any undesirable conditions. This practice minimizes the effects on natural drainage patterns and does not interfere with surface hydrology. *(see attached schematic).*

If conditions require more serious intervention, "plating" will be utilized (the practice of combing drilling mud or clay soils as a binder with native sand and/or native gravel) to build a stable "plate" base 2" to 8" thick. On these areas access roads will be graveled 12 feet wide with 20-foot wide pullouts 100 feet long at 1,000-foot intervals. Plating is a limited solution due to the lack of clay soils in the area and usage of drilling mud as a binder limits application to approximately 1,200 feet per well. *(see attached schematic).*

If greater intervention is required, the roads will be upgraded to the standard of a collector road. *Kennedy Oil will continually monitor the condition of all access roads.*

Signs will be posted restricting travel to authorized personnel. Denial of the use of these roads to the public will be beneficial to both the BLM and Kennedy Oil as damage beyond the right-of-way and vandalism of equipment are possible.